

REMARKS

Claims 1-29 remain pending in the present application with all claims being rejected.

The Examiner rejected Claims 1-15 and 22 under U.S.C. §102(b) as being anticipated by U.S. Patent No. 4,784,737 (Ray), Claims 15, 16, 18-21, 26, 27 and 29 under U.S.C. §103(a) as being unpatentable over Ray in view of U.S. Patent No. 6,245,564 (Goldman), Claim 17 under U.S.C. §103(a) as allegedly being unpatentable over Ray in view of U.S. Patent No. 5,789,213 (Hui), and Claims 23-25 and 28 under U.S.C. §103(a) as allegedly being unpatentable over Ray in view of U.S. Patent No. 6,233,482 (Hofmann).

In the Response to the Arguments section of the final Office Action the Examiner states that "If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art."

Contrary to Ray, the present invention **does not involve piercing the cell membrane**, but rather is placed next to a cell and uses the electrical signal to make small pores in the cell membrane open up. This is less damaging to the cell than the piercing method used by Ray and the pores readily seal up after the voltage is stopped. This difference is exactly the manipulative difference that the Examiner cites above and that Ray does not teach with regard to the present invention.

Another key difference is the requirement in Ray for different voltage pulses to attract macromolecules to the tip of the electrode and then to release the macromolecules or chromosomes into the cell. The inventive device is not restricted to particular voltage protocols. Indeed, the ability of the present invention **to vary and optimize the voltage parameters** permits electroporation of a variety of types of macromolecules, with respect to their size and charge, into a variety of cell types.

Ray does not teach or disclose above discussed recitations claimed in amended Claims 1 and 9. Without conceding the patentability per se of dependent Claims 2-8 and 10-29 it is respectfully submitted that they are allowable by virtue of their dependence on independent Claims 1 and 9 respectively.

Accordingly, all of the claims pending in the application, namely Claims 1-29 are believed to be in condition for allowance and allowance is respectfully requested. Should the Examiner have any questions regarding this communication or feels that an interview would be helpful in advancing the prosecution of this application, the Examiner is requested to contact the undersigned attorney.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Paul J. Farrell", written over the printed name.

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